United States Patent [19]

Battista et al.

[11] **3,742,955**

[45] **July 3, 1973**

[54] **FIBROUS COLLAGEN DERIVED PRODUCT HAVING HEMOSTATIC AND WOUND BINDING PROPERTIES**

[75] Inventors: **Orlando A. Battista,** Yardley, Pa.; **Mamerto M. Cruz, Jr.,** Pennington, N.J.; **Merritt R. Hait,** New York, N.Y.

[73] Assignee: **FMC Corporation,** Philadelphia, Pa.

[22] Filed: **Sept. 29, 1970**

[21] Appl. No.: **76,638**

[52] **U.S. Cl.**..... **128/334 R,** 106/161, 128/DIG. 8

[51] **Int. Cl.**..... **A61b 17/04**

[58] **Field of Search**..... 128/334 R, 335, 335.5, 128/DIG. 8; 106/161

[56] **References Cited**

UNITED STATES PATENTS

3,438,374 4/1968 Falb et al..... 128/334 R

OTHER PUBLICATIONS

Peacock et al., Annals of Surgery, Vol. 161, No. 2, Feb. 1965, pp. 238–247.

Korosi et al., Acta Chirurg. Academ. Scientiarum Hungaricae, Vol. 4, No. 2, 1963, pp. 137–142.

Primary Examiner—Dalton L. Truluck

Attorney—Thomas R. O'Malley and George F. Mueller

[57] **ABSTRACT**

A fluffy, finely-divided fibrous collagen derived product having hemostatic and adhesive properties sufficient to join together severed biological surfaces in a live warm blooded animal when the product is wet with blood between the surfaces. In the preparation of the product, the swelling of the collagen fibers is controlled during wet processing to prevent hornification upon drying and the recovered dry fibrous product is subjected to a deaggregation treatment to provide a mass having a bulk density of not more than 8 pounds per cubic foot and a surface area of at least 1 square meter per gram.

6 Claims, No Drawings